

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims

1-16. (Cancelled)

17. (New) A transceiver for dual-mode radio communications, comprising:
means for establishing a bi-directional link for exchanging control information;
and,

a high data rate (high-rate) transmitter coupled with a uni-directional link for transmitting user information if the transceiver is primarily a transmitter of user information; or

a high data rate receiver coupled with the uni-directional link for receiving user information if the transceiver is primarily a receiver of user information.

18. (New) The transceiver of claim 17, further comprising:

a return channel utilizing a low-data rate (low-rate) interface for supporting the user information transmissions over the high-rate link.

19. (New) The transceiver of claim 17, further comprising:

means for carrying data link control and media access layer on a high-rate physical channel in one direction; and,

means for carrying the data link control and media access layer in the reverse direction on a conventional physical channel.

20. (New) The transceiver of claim 17, wherein the dual mode transceiver comprising a high-rate transmitter further comprises:

a basic receiver section;

a basic transmitter section; and,

a high-rate transmitter section.

21. (New) The transceiver of claim 17, wherein the dual mode transceiver comprising a high-rate receiver further comprises:

- a basic receiver section;
- a basic transmitter section; and,
- a high-rate receiver section.

22. (New) The transceiver of claim 18, further comprising:

means for splitting forward and return transmissions at Data Link Control (DLC) layer wherein the high-rate section of the transceiver is operable on one Media Access Control (MAC) layer and the low-rate section is operable on a second MAC layer.

23. (New) The transceiver of claim 18, further comprising:

means for splitting forward and return transmissions at the MAC layer wherein the high-rate section of the transceiver is operable on one physical layer and the low-rate section is operable on a second physical layer.

24. (New) The transceiver of claim 23, wherein the transceiver informs other user devices on the high-rate channel that the transceiver will respond on the low-rate channel to high-rate transmission.

25. (New) A method of asymmetric communications via a transceiver, comprising the steps of:

- exchanging control information over a bi-directional link;
- transmitting user information utilizing a high-rate transmitter via a uni-directional link if the transceiver is primarily a transmitter of user information; and,
- receiving the user information utilizing a high-rate receiver via the uni-directional link if the transceiver is primarily a receiver of the user information.

26. (New) The method of claim 25, further comprising the step of supporting the user information transmissions over the high-rate link with a return channel utilizing a low-data rate (low-rate) interface.

27. (New) The method of claim 25, further comprising the step of carrying data link control and media access layer on the high-rate physical channel in one direction, wherein the conventional physical channel carries the data link control and media access layer in the reverse direction.

28. (New) The method of claim 25, wherein, for a dual mode transceiver comprising a high-rate transmitter, further comprises the steps of:

receiving narrowband transmissions in a basic receiver section;
transmitting narrowband transmissions in a basic transmitter section; and,
transmitting wideband transmissions in a high-rate transmitter section.

29. (New) The method of claim 25, wherein, for a dual mode transceiver comprising a high-rate receiver, further comprises the steps of:

receiving narrowband transmissions in a basic receiver section;
transmitting narrowband transmissions in a basic transmitter section; and,
receiving wideband transmissions in a high-rate receiver section.

30. (New) The method of claim 26, further comprising the step of splitting forward and return transmissions at Data Link Control (DLC) layer wherein the high-rate section of the transceiver is operable on one Media Access Control (MAC) layer and the low-rate section is operable on a second MAC layer.

31. (New) The method of claim 26, further comprising the step of splitting forward and return transmissions at the MAC layer wherein the high-rate section of the transceiver is operable on one physical layer and the low-rate section is operable on a second physical layer.

32. (New) The method of claim 31, further comprising the step of informing other users on the high-rate channel that the transceiver will respond on the low-rate channel to high-rate transmission.